



ABSTRACT

5 A digital imaging device captures an image
and generates a color signal from the image for
application to an output device having specific color
sensitivities, the imaging device further being one of
many devices of the same type useful with the output
10 device. The digital imaging device, for example a
digital camera, includes a color sensor for capturing
the image and generating a color signal from the
captured image, the color sensor having predetermined
spectral sensitivities, and an optical section that is
15 interposed in the image light directed to the color
sensor, the optical section also having predetermined
spectral characteristics. The combination of the
spectral sensitivities of the color sensor and the
spectral characteristics of the optical section
20 uniquely distinguish this particular imaging device
from other imaging devices of the same type. By
providing a set of matrix coefficients uniquely
determined for this imaging device, the matrix
coefficients optimally correct the spectral
25 sensitivities of the color sensor and the spectral
characteristics of the optical section for the color
sensitivities of the output device.

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